Forest Conservation and Stewardship as Tools for Wildlife Adaptation in the Klamath-Cascade

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PACIFIC FOREST TRUST

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Our Mission

Since 1993, the Pacific Forest Trust has been dedicated to conserving and sustaining America's private forests. We work with diverse partners to develop voluntary, incentive-based conservation solutions to safeguard our nation's vital forests and the communities they support.

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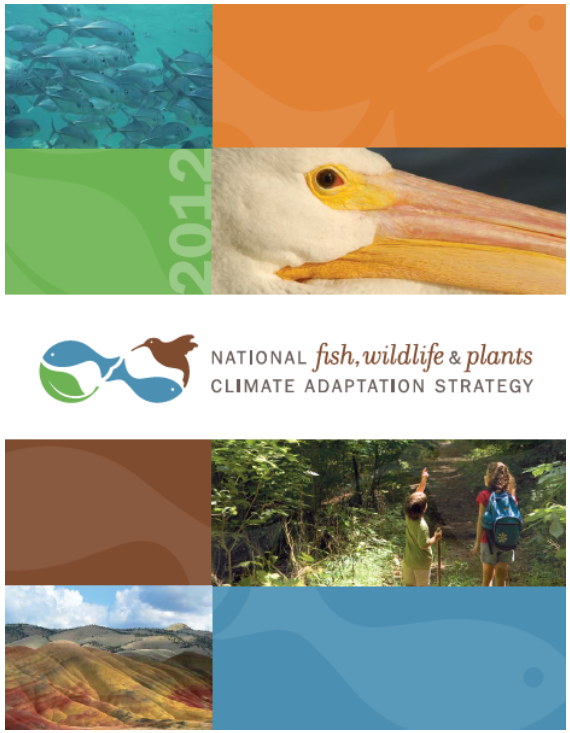
Connect the dots between science, strategy, target landscapes and tactics – to benefit wildlife adaptation

National *fish, wildlife & plants* Climate Adaptation Strategy



Released March 2013

1. Conserve & Connect Habitat
2. Manage Species & Habitats
3. Enhance Management Capacity
4. Support Adaptive Management
5. Increase Knowledge & Information
6. Increase Awareness & Motivate Action
7. Reduce Non-Climate Stressors

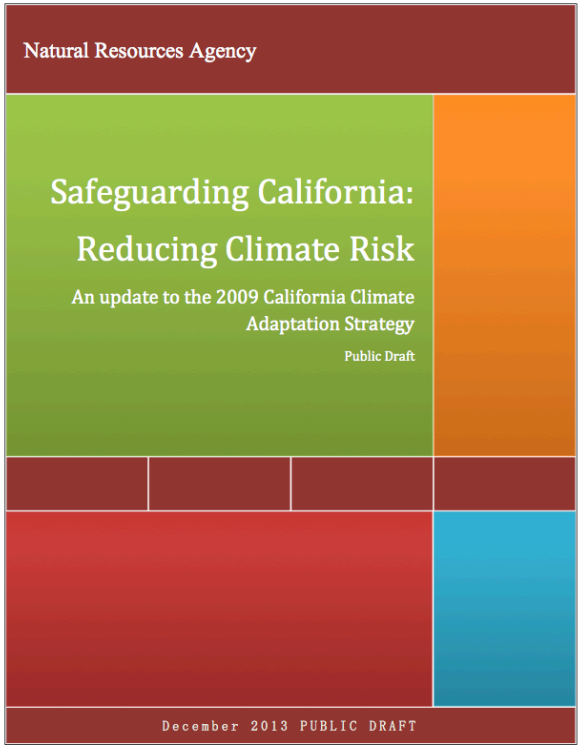
Prime Strategies relevant to forest conservation

- Conserve areas that provide high-priority habitats under current climate conditions and are likely to be resilient to climate change and/or support a broad array of species in the future; and
- Conserve large blocks of contiguous, unfragmented forest and aim for representation and redundancy of all forest types, vegetation mosaics, and natural disturbance regimes.

For forests, PFT has adopted these foci from the National Strategy:

- Build redundancy into the network of conservation areas;
- Restore habitat features . . . to maintain ecosystem function and processes and resiliency;
- Restore degraded habitats to support diversity of species assemblages and ecosystem structure and function; and
- Restore or enhance areas that will provide essential habitat and ecosystem services during ecosystem transitions in a changing climate.

California's Adaptation Strategy: *Safeguarding California* draft plan



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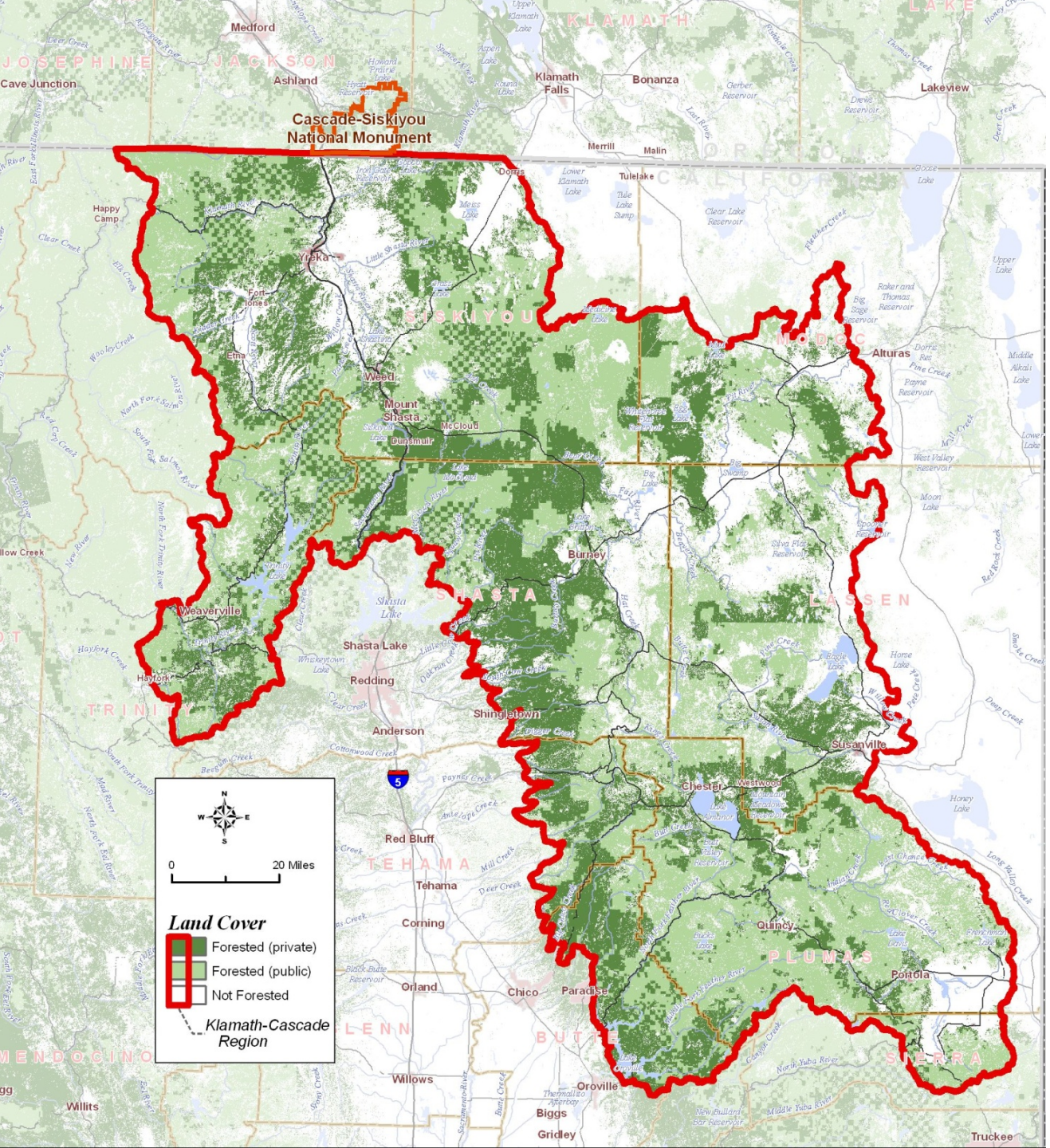
Improving forest resilience a key goal

Recommendations include:

- Identify refugia landscapes
- Promote habitat connectivity
- Conserve landscape features
- Coordinate with state, federal and private landowners
- Address wildfire threats



Klamath – Cascade region:

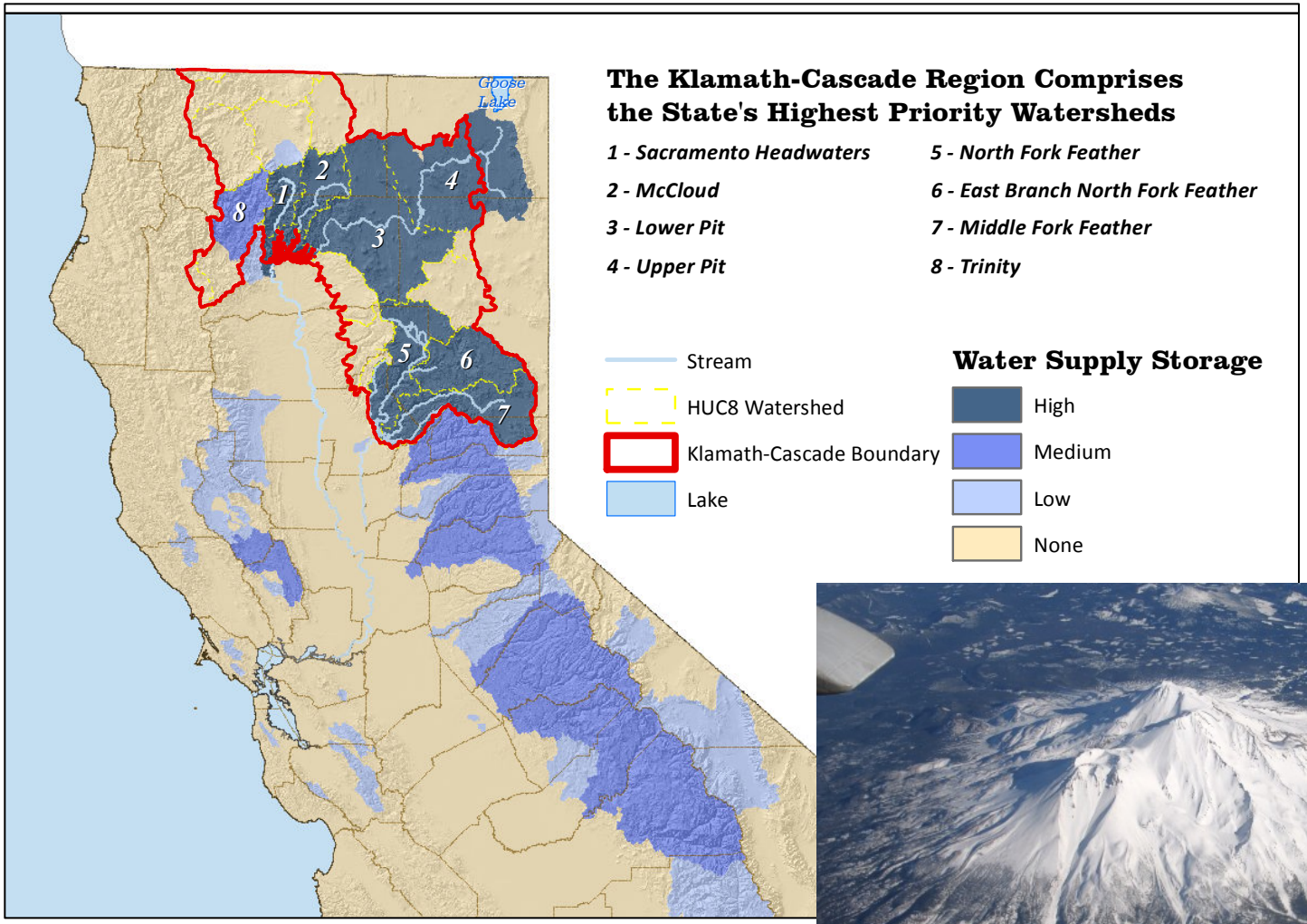
A “best bet” for a climate resilient landscape

Eco-regional cross-roads for the north state: Bridge from the Sierra Nevada to the Klamath

Home to world-class biodiversity

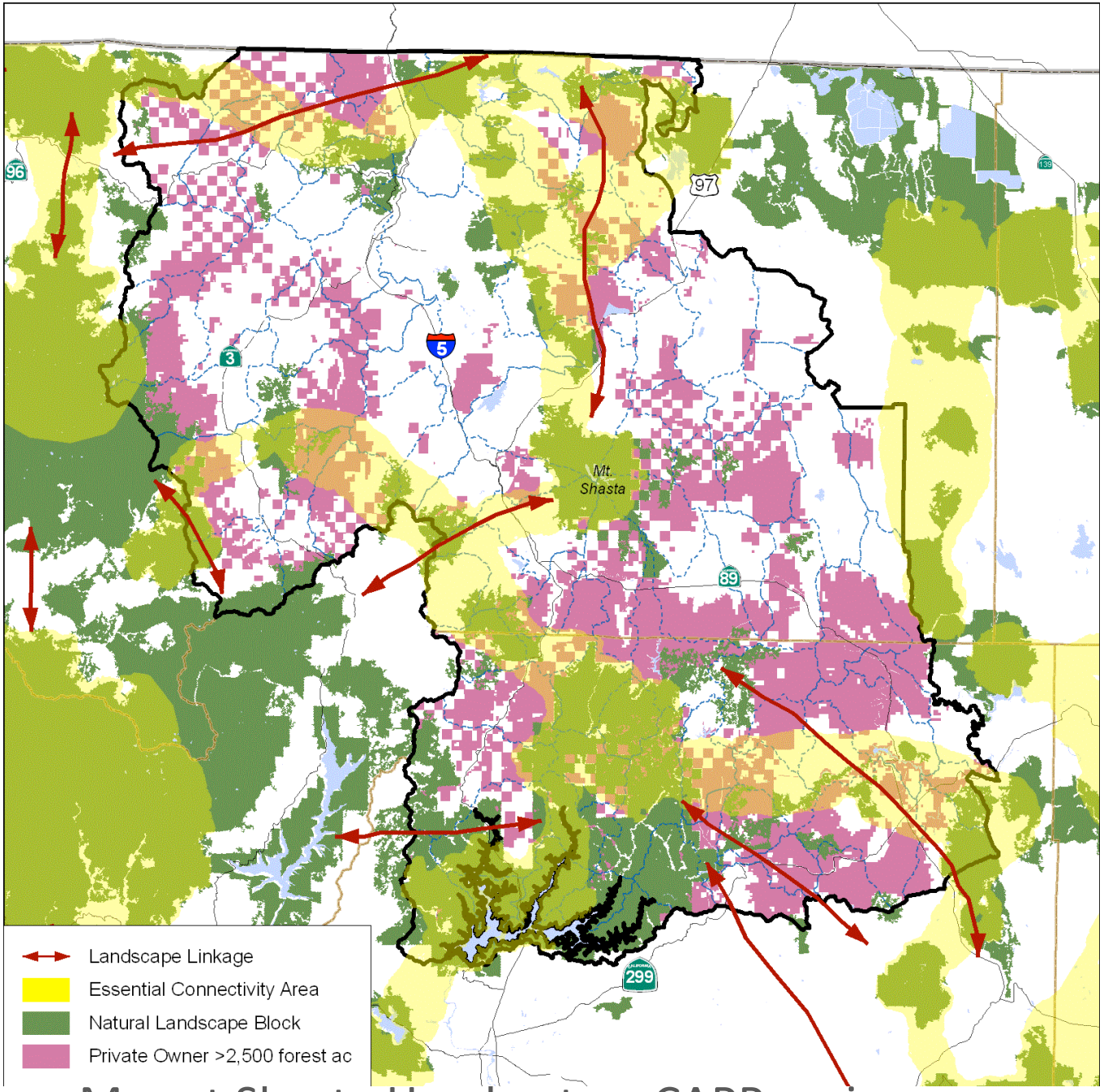
Highly productive confluence of different soils . . . Great elevational differences . . . Diverse aspects . . . Complex landscape forms . . . wide variety of unfragmented habitats

California's most abundant water



75% of state's precipitation

80 – 85% of flows into Bay Delta



Mount Shasta Headwaters CAPP region

Applying the first rule of real estate: location location location

Create new conservation corridors working with private forest owners to knit together the public lands

Management for Forest Resiliency

- Cross-boundary, landscape collaboration
- Reduce over-stocking
- Increase heterogeneity in forest structure, seral stages
- Restore special habitats across and within forest:
  - Wet meadows, fens and springs
  - Aspen groves
  - Oaks and other hardwoods

Create permanent linkages across public-private ownerships with working forest conservation easements

- A more integrated forest landscape
- More options for wildlife in forests managed for enhanced diversity
- Compensation for private owners making habitat and watershed commitments
- Fine forestry continues

Example: Hancock McCloud Project

- Pension fund owner
- Close in to McCloud – fragmentation and development threat
- Creates key links within the Shasta-Trinity Nat'l Forest

Town Block: *12,800 acres* ***River Block:*** *5,590 acres*

Hancock McCloud Working Forest Easement

Vicinity Map

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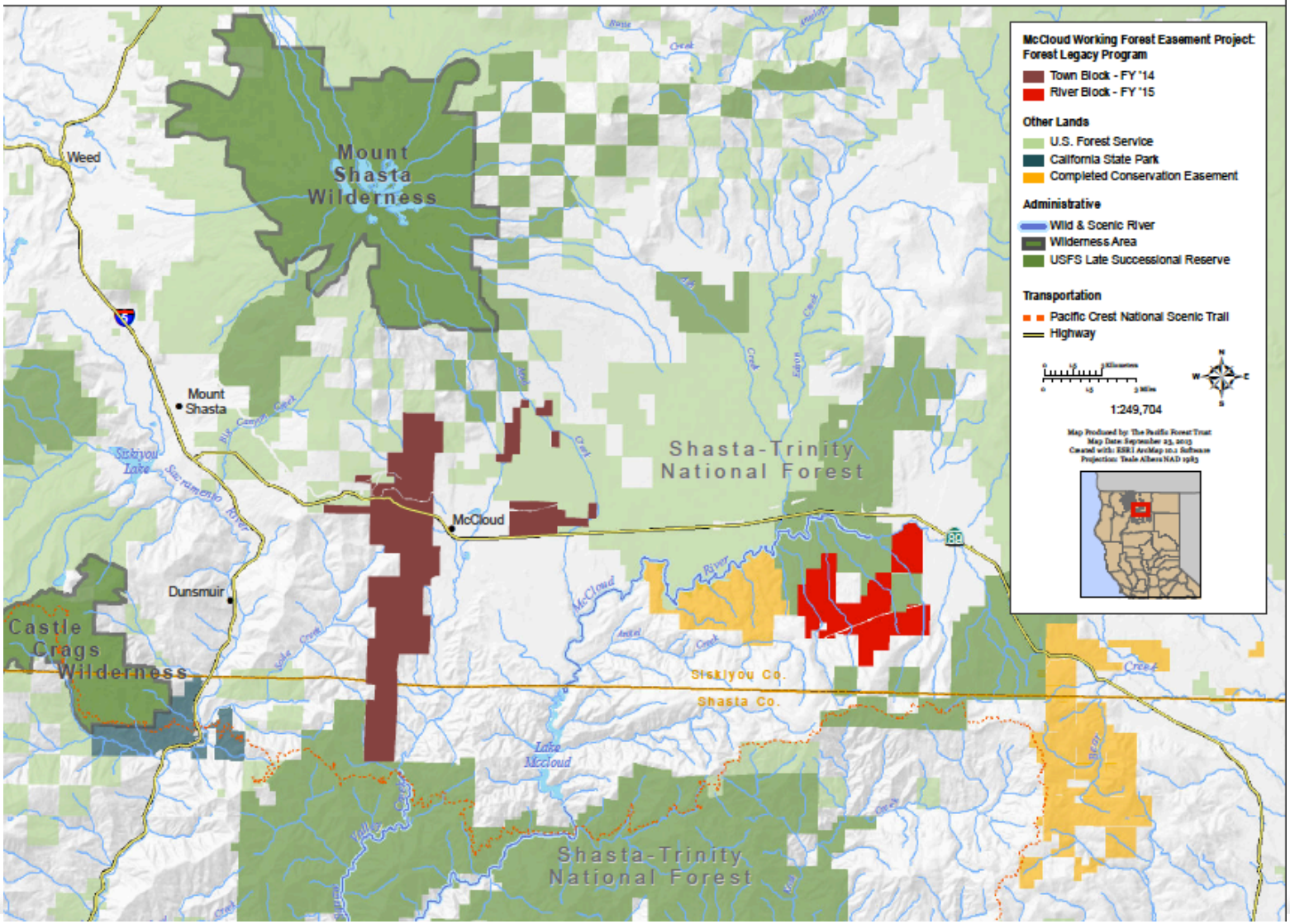

Site specific benefits to conserve for regional resiliency

- Cold, clear, spring fed water is key for resiliency
- 80+ miles of streams, 131 springs. 5% of McCloud w.
- High Priority Landscape for state water supplies
- 18 habitat types - 130 species including 8 listed
  - Northern spotted owl, willow flycatcher, Pacific fisher, etc
- Connectivity with NF Late Successional Reserves

Hancock WFCE habitat-oriented terms

- Increase large trees (30” DBH +)
- Increase multi-story stands
- Retain at least 15% of trees in harvest units for more structural complexity in new forest stand
- Harvest less than growth
- Retain/recruit more snags and down wood
- Promote early seral habitat in harvest openings

Special Habitat Management Zones

- 1170+/- acres/ 6% area to be managed for rare habitat values
- Mature forest
- Hardwoods
- Wet meadows, springs
- Aspen/riparian stands

Riparian Management Areas

- 5% +/- area
- Class I & II streams managed to restore large trees and multi-story structure
- Seasonal streams will be managed to maintain canopy cover and multi-story structure

150 foot buffer on Class I
100 foot buffer on Class II
50 foot buffer on Class III

Together we can help fish and wildlife adapt to changing climate

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